

to, or within, the Project Corridor.

Regardless, the Chicago Area Transportation Study (CATS) in preparing the 2020 RTP investigated implementing CTA rail service throughout the region. CATS reviewed the applicability of transit projects throughout the northeastern Illinois region. While several CTA rail service projects were found to have enough merit for inclusion in the 2020 RTP, CTA rail service was not recommended for implementation within the Project Corridor. The existing infrastructure in the area was reviewed for CTA rail service compatibility. Light rail is typically implemented within existing multimodal transportation corridors such as major highways or freight rail lines. There are no compatible highways or rail corridors within the Project Corridor. The nearest is I-55 and I-355 outside the Project Corridor to the north. Two rail corridors through Lemont and New Lenox already have Metra commuter rail service, so there is no reason to consider CTA rail service in these corridors. Therefore, the presence of no compatible corridors within the Project Corridor for which to implement CTA rail service and no CTA rail service recommended for the Project Corridor by the 2020 RTP, CTA rail service was not considered to be a viable alternative and was not considered further.

Metra, the commuter rail operating agency in the Chicago area, operates two lines connecting the Project Corridor to Downtown Chicago. Existing stations are located in Lemont, New Lenox, Lockport and Joliet. Service to these stations is flexible as rail cars can be added or removed from commuter trains as needed. Metra has proposed and received federal funding extending the Southwest rail service to the Project Corridor. This would provide additional service to Downtown Chicago. Growth in rail transit demand would be expected to be accommodated along these routes. However, these routes do not address demand for north-south travel between the Project Corridor and job centers in DuPage and northwest Cook County, a primary need of the Transportation System Improvement.

Metra is, however, considering establishing a new commuter rail line that could provide north-south commuter rail service from the Project Corridor to DuPage County. Metra is currently studying the feasibility of a 169 kilometer (105 mile) circumferential commuter rail service referred to as the Outer Circumferential Commuter Rail Service.

The Outer Circumferential Rail Service is a proposed commuter rail service that would provide suburban-to-suburban commuter rail service on existing EJ&E track located a radial distance of 56 kilometers (35 miles) west of Chicago. The service would run from Chicago's south suburbs to Waukegan, following a circumferential route around the City of Chicago. If implemented, the service could serve a portion of the southern communities of the Project Corridor with potential stations at the Cities of Joliet and Brisbane, a community bordering the Project Corridor to the south. The service could provide these communities access to the fringe suburban job centers in western DuPage County.

CATS within the RTP designates the entire EJ&E commuter service corridor as a "corridor for further study" and a core segment (about 50% of the total corridor) as a "plan project". "Plan project" means the core segment is eligible for federal funding and construction upon completion of feasibility and environmental impact studies.

As part of the RTP planning process, CATS conducted a preliminary feasibility review of the Outer Circumferential Rail Service and compared the service with two other com-

12/18/00

muter lines, the North Central Service and South Suburban Rail Corridor. Those two lines were also designated “plan projects” in the 2020 RTP. Among the three lines, the review projected the Outer Circumferential Rail Service to have the lowest ridership and highest cost. Table 3-1 presents key findings of the CATS preliminary review.

<b>Table 3-1</b> <b>Daily Performance Measures of 2020 RTP Recommended</b> <b>Commuter Rail Projects</b>				
Line	Boardings	Cap Cost per Boarding	Passenger Kilometers (miles) Traveled	Capital Cost Per Passenger Kilometers (miles) Traveled
EJ&E Outer Circumferential Corridor (new location)	3,900	\$57,800	55,000 (34,000)	\$4,100 (\$6,600)
North Central Service (addition of second rail to existing service)	7,800	\$39,800	136,500 (84,800)	\$2,300 (\$3,700)
South Suburban Rail Corridor (new location)	21,400	\$8,700	717,800 (446,000)	\$400 (\$250)

Furthermore, CATS found the EJ&E corridor to contain more environmental constraints relative to the two other Metra corridors including 3,898 hectares (9,633 acres) of water resources, 951 hectares (2,350 acres) of natural area, 8,192 hectares (20,243 acres) of recreation area and five historic sites.

Since publication of the 2020 RTP, Metra completed an additional conceptual level feasibility study of the Outer Circumferential Rail Service in 1999. The study found no fatal flaws that precluded the service and concluded that some potential existed [\(T.Y LIN, 1999\)](#). Demand was believed strongest in the northern one-half of the corridor from Waukegan to West Chicago due to higher employment and population densities. Service demand was anticipated to develop over the longer term within the southern one-half of the corridor, including the Project Corridor, from West Chicago to Chicago’s south suburbs based on employment and population forecasts.

The feasibility study recommended the rail service to be implemented in two phases with one-half of the corridor developed in each phase. Phase I would be implemented where demand was greatest. The preliminary feasibility study determined the corridor’s northern one-half to be most feasible for service implementation in Phase I based on existing and projected population and employment densities.

Prior to implementation though, the feasibility study recommended continued study and travel demand modeling. Should additional study find the service feasible, Metra estimates Phase I, from Barrington to West Chicago, could be operational in 15 plus years based on experience on a similar line to the north. Should the northern segment be developed first, as is recommended by the conceptual feasibility study, it is reasonable to assume that another 10 to 15 years would be required to develop the southern segment. Therefore, service to the Project Corridor would not be expected until 2025, or beyond the planning horizon for this project [\(T.Y LIN, 1999\)](#).

While the Metra circumferential rail service would complement the Transportation System Improvement and provide a transportation enhancement for the southern portion of

the Project Corridor, its feasibility is not confirmed. Should continued feasibility study lead to implementation, the service would not be available to the Project Corridor within the planning horizon of the Transportation System Improvement. Therefore, the circumferential rail service was not considered a viable service for this SFEIS.

Given that existing Metra lines provide access to downtown Chicago, and that no north-south service exists or will be established within the planning horizon of the Transportation System Improvement, Metra commuter rail has limited utility to improving mobility in the north-south direction aside from relieving traffic on the local system of commuters using Metra rail for commuting to downtown Chicago (a benefit considered in the traffic projections for the No-Action and Build Alternatives).

In sum, existing and planned Metra and Pace mass transit service within the Project Corridor does not represent a viable stand-alone alternative. Pace is roadway dependent and is limited by the capacity of the existing roadway network and has limited capacity to improve local and regional mobility. Metra already provides good service to downtown Chicago, but has no existing or viable service beyond existing lines to downtown projected for implementation within the planning horizon of the Transportation System Improvement. Therefore, Metra has limited utility in improving regional mobility to the north, or to improving access between the Project Corridor and expanding job centers within DuPage and western Cook Counties.

Since neither Pace nor Metra alone, or in combination, would satisfy the need for the Transportation System Improvement, the Mass Transit Alternative is not considered an adequate solution to the transportation needs of the Project Corridor. Therefore, the Mass Transit Alternative will not be further developed as an alternative, because it does not fulfill the Purpose and Need of the project.

While limited as a stand-alone alternative, mass transit is supported by governments at all levels and is an essential element of the transportation system of the Chicago region. Therefore, it should be planned and integrated with roadway improvements to improve access and mobility. For this reason, existing and proposed mass transit was incorporated within all Alternatives.

### **3.2.3 Tollroad/Freeway Alternative**

As for the remaining Build Alternatives, the Tollroad/Freeway Alternative combined a full access controlled tollroad/freeway facility with the No-Action improvements presented in Section 3.2.1. The Tollroad/Freeway facility would provide a six-lane divided highway from I-55 to 127<sup>th</sup> Street and a four-lane divided highway from 127<sup>th</sup> Street to I-80. The facility would be constructed on a 91.4 meter (300 foot) right-of-way throughout and follow the alignment identified as the Preferred Alternative in the 1996 FEIS.

The recommended alignment would parallel Lemont Road from I-55 to the Des Plaines River. At that point, the alignment shifts to the southeast, paralleling State Street approximately 1.2 kilometers (0.75 miles) to the west from 127<sup>th</sup> Street to 143<sup>rd</sup> Street. The alignment would then parallel Gougar Road and curve diagonally to the east and connect to I-80 approximately 0.4 kilometers (0.3 miles) east of Cedar Road. Exhibit 3-3 locates the Tollroad/Freeway Alternative alignment.

The Tollroad/Freeway Alternative would provide no direct access to adjacent properties. Access would be fully controlled and provided at six recommended interchange locations at I-55, 127th Street, 143rd Street/IL Route 171 (Archer Avenue), IL Route 7 (159th Street), U.S. Route 6 and I-80. All other major cross streets would be grade separated with no access.

Should the facility be constructed as a tollroad, recommended toll collection facilities would include a mainline plaza in the vicinity of Bruce Road, and ramp plazas located within the northbound (NB) and southbound (SB) interchange ramps at U.S. Route 6; NB entrance ramps and SB exit ramps at IL Route 7, IL Route 171 and 127th Street. All toll collection facilities would be I-PASS electronic toll collection system compatible. [1996 FEIS Chapter 3, Section 3.2.4.3](#) provides a detailed description of the alignment.

### **3.2.4 Lemont Bypass Alternative**

The Lemont Bypass Alternative combined a tollroad/freeway facility on new alignment in the northern one-quarter and principal arterial on existing alignment in the southern three-quarters with the No-Action improvements presented in Section 3.2.1. The Alternative evaluates the performance of adding capacity to existing roadways for north-south travel and providing a new bridge crossing over the Des Plaines River. The Lemont Bypass would provide a six-lane tollroad/freeway facility in the Project Corridor's northern one-quarter and a four-lane principal arterial in the southern three-quarters. Exhibit 3-3 locates the Lemont Bypass Alternative alignment.

The proposed facility in the northern one-quarter of the corridor would be similar in design, access control and alignment to the Tollroad/Freeway Alternative between I-55 and 127<sup>th</sup> Street. Between 127<sup>th</sup> and 143<sup>rd</sup> Streets, the facility would transition from a tollroad/freeway to an at-grade principal arterial.

At 143<sup>rd</sup> Street, the alignment would shift from the Tollroad/Freeway Alignment to Gougar Road where it would proceed south along Gougar Road from 143<sup>rd</sup> to a new interchange at I-80. The principal arterial would require a minimum 30.5 meter (100 foot) right-of-way. Signalized at-grade intersections would be provided at major cross streets along the arterial segment. Numerous other minor road and driveway intersections would be sign controlled to stop cross traffic.

### **3.2.5 Enhanced Arterial Alternative**

The Enhanced Arterial Alternative combined improvements to a select group of existing arterials with the No-Action improvements as proposed. The arterials proposed for improvement consisted of IL Route 53, Joliet Road, 135th Street, IL Route 171, Lemont Road/State Street and Gougar Road (Exhibit 3-3). The Enhanced Arterial Alternative was developed to enhance capacity for north-south travel through improvements to existing roadways and optimal use of existing bridge crossings over the Des Plaines River. A total of three existing bridge crossings at 135th Street, State Street/Lemont Road and IL Route 83 were incorporated into this Alternative.

From I-80, the Enhanced Arterial Alternative alignment follows Gougar Road to 151st Street where the alignment transitions into State Street using an S-curve. North of the S-curve the alignment splits into three legs. The central leg continues north along State Street to an existing interchange at I-55. The western leg branches from the central leg at